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## ZOOLOGY.

**An Australasian Sub-family of Fresh-water Atherinoid Fishes.**—Mr. J. Douglas Ogilby, of the Australian Museum, of Sydney, has recently sent me a photograph and description of a new species of a genus called *Aristeus* by Castelnau. This genus is of much interest from a morphological as well as geographical point of view. Mr. Ogilby has asked, "Is it an Atherinid and allied to *Nematocentris*? or should a new family be formed of it?" Mr. Ogilby, unlike the original describer, is quite happy in his appreciation of its affinities.

The genus *Melanotænia* was proposed by Gill in 1862 (Proc. Acad. Nat. Sci. Phila. 1862, p. 280) for a fish called *Atherina nigrans* by Richardson, and was subsequently renamed *Nematocentris* (Peters, 1866), *Strabo* (Kner & Steind, 1866), and *Zantecla* (Cast., 1873). It has been generally referred to the *Atherinidæ*, but Kner and Steindachner were disposed to associate it with *Pseudomugil* in their family *Pseudomugilidæ*, and Castelnau proposed a new family, *Zanteclidæ*, for it. No satisfactory family characters were given.

The genus *Aristeus* was described by Castelnau in 1879, and by him referred to the family *Gobiidæ*. Steindachner, in a notice of the genus (Zool. Jahresber. 1879, p. 1061), happily hit at its relations in the words, "*Aristeus* N. G. Casteln. (wahrscheinlich.=*Nematocentris*, d. Ref.)."

There are two specially interesting features of these genera.

(1) They deviate from the typical Atherinids in the elongated anal fin which advances far forward, and with the advance are coordinated an advanced position of the anus and of the ventral fins, whose roots are little behind the bases of the pectoral fins.

(2) The species of both genera are confined to the fresh-waters of the Australasian realm and the constituent group is thus one more of the groups limited to a single realm.

The deviations of the genera from the typical *Atherinidæ* appear to be sufficient to warrant their segregation in a peculiar sub-family which may be named *Melanotæniinæ*. But confirmation by anatomical characters are very desirable. The sub-family may be defined provisionally, as follows:

**MELANOTÆNIINÆ.** Atherinids with a spinous dorsal, whose foremost spine is robust and rest weak, a very long anal, and thoracic

ventral fins. Inhabitants of the fresh waters in the Austrogean (Australasian) realm.

The genera may be differentiated as follows:

**MELANOTÆNIA.** Melanotæniines with a little compressed fusiform body, slightly curved dorso-rostral contour, and a blackish lateral band.

**RHOMBATRACTUS.** Melanotæniines with a much compressed rhombofusiform ventradiform body, emarginate dorso-rostral contour, and no distinct lateral band.

*Aristeus* having been used in 1840 by Duvernoy for a genus of Crustaceans, is unavailable for the group so-called by Castelnau, and *Rhombatractus* is used as a substitute.

*Rhombatractus* has a curious superficial resemblance to a toxotid on account of its compressed body, declining back and ventradiform contour, but the head is that of an atherinid.

It may be that the Melanotæniines should be accorded family rank, but further data are desirable before such a claim is recognized. One of the subordinal characters of the Percosoces, in any case, must be modified to fit these fishes.—THEODORE GILL.